### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
Dominique BERNARD et al.	)	Group Art Unit: Unassigned
Application No.: Unassigned	)	Examiner: Unassigned
Filed: June 21, 2001	)	
For: ISOLATED CATHEPSIN L TYPE CYSTEINE PROTEASES AND REDUCING INTERCORNEOCYTE COHESION/PROMOTING DESQUAMATION THEREWITH	) ) ) ) ) )	

#### PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Prior to examination of the above-captioned patent application, kindly enter the following amendment.

#### **IN THE SPECIFICATION:**

Kindly replace the Paragraph Beginning at Page 1, Line 5 with the following:

--This application is a divisional of U.S. Patent Application Serial No. 09/143,446, filed on August 28, 1998, which claims priority from French Application No. 97-10818, filed August 29, 1997, which are herein incorporated by reference.--

#### IN THE CLAIMS:

Kindly cancel claims 1-9 and 12 without prejudice or disclaimer to the subject matter therein.

Kindly replace claims 10, 13, 20-25, and 27 as follows.

10. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

wherein the cysteine protease polypeptide is a polypeptide fragment.

13. (Amended) A cosmetic/pharmaceutical composition comprising an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons, or fragment thereof;

formulated into physiologically acceptable medium therefor.

20. (Amended) A regime or regimen for combating excessive intercorneocyte cohesion or for promoting desquamation in a mammalian subject in need of such treatment, comprising topically applying to the skin or mucosae of such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide

comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons.

- 21. (Amended) A regime or regimen for treating a desquamation disorder or affliction affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons.
- 22. (Amended) A regime or regimen for treating hyperkeratosis affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons.
- 23. (Amended) A regime or regimen for treating xerosis, ichthyoses, psoriasis, benign or malignant tumor lesions, or reactive keratoses affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons.

- 24. (Amended) A regime or regimen for treating leukokeratosis of the uterine neck during prolapsus, buccal leukokeratoses or keratotic benign tumor lesions of the malpighian mucosae affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons.
- 25. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

wherein the cysteine protease polypeptide is a complex of said cysteine protease polypeptide, or polypeptide fragment thereof, and having any structural or functional molecule specifically bonded thereto.

27. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

wherein the cysteine protease polypeptide is a monoclonal antibody or antisera prepared/purified from the cysteine protease polypeptide, or polypeptide fragment thereof.

#### Remarks

Entry of the foregoing amendments, prior to examination, is respectfully requested.

No prohibited new matter has been added with these amendments. The claims have been amended in order to place the dependent claims in independent form, as independent claim 1 is canceled herein.

Based on the foregoing, favorable examination on the merits is respectfully requested. If the Examiner has any specific questions relating to this Amendment or any other matter, he is respectfully requested to contact the undersigned so that prosecution of this application may be expedited.

Respectfully submitted,

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Date: June 21, 2001

#### Attachment to Preliminary Amendment dated June 21, 2001

Marked-up Claims 10, 13, 20-25, and 27

Page 1, Paragraph Beginning at Line 5

This application is a divisional of U.S. Patent Application Serial No. 09/143,446, filed on August 28, 1998, which claims priority from French Application No. 97-10818, filed August 29, 1997, which are herein incorporated by reference. [This application claims priority under 35 U.S.C. § 120 of FR-97/10818, filed August 29, 1997, assigned to the assignee hereof and hereby expressly incorporated by reference.]

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10. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

wherein the cysteine protease polypeptide is a polypeptide fragment [A polypeptide fragment of the cysteine protease polypeptide as defined by Claim 1].

13. (Amended) A cosmetic/pharmaceutical composition comprising an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons, or fragment thereof;

[as defined by Claim 1, or polypeptide fragment thereof] formulated into physiologically acceptable medium therefor.

20. (Amended) A regime or regimen for combating excessive intercorneocyte cohesion or for promoting desquamation in a mammalian subject in need of such treatment, comprising topically applying to the skin or mucosae of such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons [the cysteine protease polypeptide as defined by Claim

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- 21. (Amended) A regime or regimen for treating a desquamation disorder or affliction affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons [the cysteine protease polypeptide as defined by Claim 1].
- 22. (Amended) A regime or regimen for treating hyperkeratosis affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons [the cysteine protease polypeptide as defined by Claim 1.
- 23. (Amended) A regime or regimen for treating xerosis, ichthyoses, psoriasis, benign or malignant tumor lesions, or reactive keratoses affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons [the cysteine protease polypeptide as defined by Claim 1].

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- 24. (Amended) A regime or regimen for treating leukokeratosis of the uterine neck during prolapsus, buccal leukokeratoses or keratotic benign tumor lesions of the malpighian mucosae affecting a mammalian subject in need of such treatment, comprising administering to such mammalian subject an effective amount of an isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons [the cysteine protease polypeptide as defined by Claim 1].
- 25. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

wherein the cysteine protease polypeptide is a [A] complex of said cysteine protease polypeptide [as defined by Claim 1], or polypeptide fragment thereof, and having any structural or functional molecule specifically bonded thereto.

27. (Amended) An isolated, substantially pure natural or synthetic polypeptide comprising a cathepsin L type cysteine protease having an apparent molecular weight ranging from 15 to 32 kilodaltons;

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wherein the cysteine protease polypeptide is a [A] monoclonal antibody or antisera prepared/purified from the cysteine protease polypeptide [as defined by Claim 1], or polypeptide fragment thereof.